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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/826,927

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Richard Eugene Crandall

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EXAMINER

TRAN, PHUOC

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

08/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/826,927

Applicant(s)

CRANDALL ET AL.

Examiner

Phuoc Tran

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/7/05</u> . | 6) <input type="checkbox"/> Other: ____.  |

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1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1, 4, 7, 8, 11, 14, 15, 18, 21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1, 4, 7, 8, 11, 14, 15, 18, 21 recite the mere manipulation of data or an abstract idea, or merely solves a mathematical problem without a limitation to a practical application. Claims 1, 4, 7, 8, 11, 14, 15, 18, 21 merely manipulate data without ever producing a useful, concrete and tangible result. The claimed invention simply applies mathematical functions to abstract digital values (i.e., data) and produces other abstract digital values (i.e., the compressed data).

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 7, 8, 9, 14-16, 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakayama et al (6,711,295).

As to claim 1, Nakayama et al disclose a computer-implemented method for compressing data, the method comprising: applying a dynamic prediction function to the data to yield first compressed data (Fig. 1, item 102; Fig. 4; col. 5, line 14 – col. 6, line 47); applying a Golomb coding function to the first compressed data to yield second compressed data (Fig. 1, item 104; col. 6, lines 44-67); and outputting the compressed data (Fig. 1; items 104', 113; col. 7, lines 47-51).

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As to claim 2, Nakayama et al disclose that the data is image data (col. 3, lines 8-12).

As to claim 7, Nakayama et al disclose that the first compressed data has a Laplacian distribution (col. 4, lines 30-32).

Claims 8, 9, 14-16, 21 recite limitations that are similar to those of claims 1, 2, 7.

Therefore, they are rejected for the same reasons.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 3-6, 10-13, 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama et al (6,711,295).

As to claim 3, 10, 17, Nakayama et al disclose all the claim limitations except for using audio data. However, one of ordinary skill in the art would recognize that audio data and image data are very similar when the data is represented by a sequence of digital data. Therefore, it

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would have been obvious to one of ordinary skill in the art to apply the Nakayama et al's teaching to audio data by simply substitute image data with audio data.

As to claims 4- 5, 11-12, 18-19, Nakayama et al disclose all the claim limitations except for transforming RGB domain to YUV domain. Nakayama et al clearly suggest such color transformation at column 3, lines 11-18. Therefore, it would have been obvious to one of ordinary skill in the art to add such color transformation as suggested by Nakayama et al.

As to claim 6, 13, 20, the same arguments with respect to claims 3, 10, 17 and 4-5, 11-12, 18-19 above apply to claims 6, 13, 20.


8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Seroussi et al (5,764,374) and Levine (6,125,348) disclose lossless data compression using Golomb coding technique.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuoc Tran whose telephone number is (571) 272-7399. The examiner can normally be reached on MON-FRI.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
**PHUOCTRAN**  
**PRIMARY EXAMINER**